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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
CHANG, VICTOR S				
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1794				
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10/22/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/698,438

**Applicant(s)**

KII ET AL.

**Examiner**

VICTOR S. CHANG

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/7/08, 8/8/08 and 8/22/08.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.  
4a) Of the above claim(s) 3, 5 and 9-19 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 2, 4 and 6-8 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SF-08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Introduction***

1. Applicant's amendments and arguments filed on 8/22/2008 and 8/7/2008 have been entered. The declaration filed 8/8/2008 has also been entered. New claims 14-19 are entered. Claims 1-19 are pending. Claims 3, 5 and 9-13 are previously withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In response to the amendment, the grounds of rejection have been updated as set forth below.

### ***Election/Restrictions***

4. Newly submitted claims 14-19 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Inventions of claims 1-13 and claims 14-19 are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful as a self-adhesive article and the inventions are deemed patentably distinct because there is nothing of record to show them to be obvious variants. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 14-19 are withdrawn

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from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Claims 1, 2, 4, 6-8 and 14-19 are active.

***Rejections Based on Prior Art***

5. Claims 1, 2, 4, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-183085 [translation, see IDS filed 8/30/2005].

JP '085 relates to a heat resistant adhesive adhered on a foam (porous) substrate [abstract; 0001]. The adhesive is a polymer comprising monomers including carboxyl group containing acrylic acid, etc. [0017]. The adhesive is crosslinkable with polyfunctional isocyanate crosslinking agent [0010-0011 and 0029]. The amount of crosslinking agent is in the range of 0.01-0.5 wt% to avoid gel fraction exceeding 50% [0030]. The glass transition temperature of the acrylic acid containing adhesive includes -30°C [0014]. Useful porous substrates include polymer foams and nonwoven (known for use as battery separators) [0052].

For claims 1, 2, 4 6 and 8, the term “partially crosslinked” is interpreted as a polymeric material in which not all the crosslinkable functional groups have been reacted with crosslinking agent. JP '085 anticipates the term “partially crosslinked” in claim 1, because the amount of crosslinking agent is range of 0.01-0.5 wt% to avoid gel fraction exceeding 50%, i.e., less than fully gelled or fully crosslinked by crosslinking agent. Regarding the contemplated end use in the preamble, it has not been given patentable weight, because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the

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introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951). Regarding the transitional term “consisting essentially of”, absence of a clear indication of basic and novel characteristics, the transitional term “consisting essentially of” is construed as equivalent to “comprising.” If applicant contends that additional steps or materials in the prior art are excluded by the recitation of “consisting essentially of,” applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant’s invention. See MPEP § 2111.03.

6. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-183085 [translation in IDS filed 8/30/2005].

The teachings of JP ‘085 are again relied upon as set forth above.

For claim 7, JP ‘085 is silent about the supporting ratio (surface coverage ratio) of the adhesive over the substrate. However, the examiner takes Official notice that reduced adhesive surface coverage is common and well known, motivated by the desire to adjust the amount of adhesiveness and/or a reduced cost. It would have been obvious to one of ordinary skill in the art of adhesive to modify the invention of JP ‘085 accordingly.

### ***Response to Argument***

7. Applicants argue at Remarks, submitted 8/7/2008, page 7 that

“the recitation of a battery separator is a structural element recited in the preamble of the claim and this element gives the claim life and meaning.”

However, since the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause, the examiner maintains that despite the

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preamble, the broad claim language fails to exclude JP '085. Nor is there any evidence that the preamble necessarily excludes the structure of JP '085.

Applicants argue at page 8 that

“In the case where a tackifier is used in a battery cell as a separator, since a polar solvent is used as an electrolyte, a side reaction occurs due to the tackifier, which is a low molecular component. Thus, a tackifier is not used in the present invention and is excluded from claim 1.”

However, the transitional term “comprising essentially of” is construed as equivalent to “comprising”, i.e., tackifier is not excluded from the scope of the claimed invention.

Applicants argue at page 8 that

“As can be seen from the Declaration, batteries were prepared using electrolytes containing a tackifier and not containing a tackifier. The batteries containing electrolytes including a tackifier exhibited a faster degradation in discharge capacity as compared to a battery containing an electrolyte having no tackifier.”

However, a review of the Declaration shows that the experiments are carried out by directly mixing tackifier in an electrolyte, whereas the prior art incorporate tackifier in the adhesive composition. Absent any evidence that the tackifier in the adhesive composition is necessarily detrimental to the end use, the declaration is deficient.

Applicants argue at page 9 that

“the lack of the teaching of the second step in JP '085 shows that the adhesive of JP '085 is not partially crosslinked since the second step in Example 1 does not merely complete the step of partial crosslinking.”

However, applicants are respectfully reminded that the claim language “partially crosslinked adhesive” fails to specify the stage or amount of functional group being crosslinked. JP '085 anticipates the term “partially crosslinked adhesive” in claim 1, because the amount of crosslinking agent is range of 0.01-0.5 wt% to avoid gel fraction

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exceeding 50%, i.e., less than fully gelled or fully crosslinked by crosslinking agent.

Applicants may wish to clarify the intended scope of crosslinking.

Applicants argue at page 9 that

“regarding the Official Notice, with respect to the function of a battery, it is submitted that it is preferable that the supporting ratio of an adhesive is lower, but rather the contrary is preferable when adhesion to a battery is considered. Thus, the Examiner’s statement is overbroad and generalized, and not consistent with Applicants’ comments. In addition, it was argued that Applicants do not agree that it is common or well known to reduce adhesive surface coverage when adhesion to a battery is considered.”

However, since the use limitation has not been given patentable weight, applicants’ argument has been misplaced. Further, absent a clear reasoning or evidence, applicants’ argument contrary to the Official notice is unpersuasive. Applicant must specifically point out the supposed errors in the Examiner’s Official notice, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241. MPEP § 2144.03.C.

### ***Conclusion***

8. Applicant’s amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTOR S. CHANG whose telephone number is (571)272-1474. The examiner can normally be reached on 7:00 am - 5:00 pm, Tuesday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor S Chang/  
Primary Examiner, Art Unit 1794